

Remarks

Upon entry of the foregoing amendment, claims 1-14 are pending in the application, with claims 1, 9 and 12 being the independent claims. Claims 1, 4 and 5 are amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

In the Office Action dated September 3, 2004, claim 3 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1, 4, 5, 9 and 10 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Griffith *et al.*, U.S. Patent No. 6,078,628. Claims 2 and 8 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Griffith *et al.* Claim 7 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Griffith *et al.* in view of Kahn, U.S. Patent No. 4,194,154. Claim 11 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Griffith *et al.* in view of Perthold *et al.*, U.S. Patent No. 6,314,142. Claims 6 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Griffith *et al.* in view of Cox *et al.*, International Application No. WO 97/30521.

Rejections under 35 U.S.C. § 112, Second Paragraph

Claim 1 recites “a frequency divider” in line 12 and therefore provides sufficient antecedent basis for “the frequency divider” recited in claim 3 in line 2. Accordingly, Applicant requests that this rejection be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 102(e)

Applicant respectfully traverses the rejection of claim 1 based on Griffith *et al.* Independent claim 1 has been amended to recite “wherein the phase modulator includes a phase-lock-loop.” Support for this amendment is found, for example, on page 4, lines 5-7 of the specification. Support for this amendment is also found, for example, in Figures 6, 7, 8 and 9 and their corresponding descriptions within the specification. Griffith *et al.* does not disclose an amplification system in which the phase modulator includes a phase-lock-loop. Accordingly, independent claim 1 is believed to be allowable over Griffith *et al.*

Claims 4 and 5 depend from independent claim 1 and are allowable for at least the reasons applicable to claim 1, as well as due to the features recited therein.

Applicant respectfully traverses the rejection of claim 9 based on Griffith *et al.* Independent claim 9 recites “a Cartesian feedback path from the output of the amplifier to the digital processing subsystem.” Support for this original claim is found, for example, in Figure 3 and its corresponding description within the specification. Griffith *et al.* does not disclose an amplification system having feedback from the output of the amplifier to a digital processing subsystem. Accordingly, independent claim 9 is believed to be allowable over Griffith *et al.*

Claim 10 depends from independent claim 9 and is allowable for at least the reasons applicable to claim 9, as well as due to the features recited therein.

Rejections under 35 U.S.C. § 103(a)

Claims 2 and 8 stand rejected based on Griffith *et al.* Claims 6 and 12-14 stand rejected based on Griffith *et al.* in combination with Cox *et al.* Claim 7 stands rejected

based on Griffith *et al.* in combination with Kahn. Claim 11 stands rejected based on Griffith *et al.* in combination with Perthold *et al.* Claims 2, 6, 7 and 8 depend from independent claim 1. Applicant believes claims 2, 6, 7 and 8 are patentable as depending from an allowable base claim, for the reasons applicable to claim 1 mentioned above, as well as due to the features recited therein. Claim 11 depends from independent claim 9. Applicant believes claim 11 is patentable as depending from an allowable base claim, for the reasons applicable to claim 9 mentioned above, as well as due to the features recited therein.

Applicant respectfully traverses the rejection of independent claim 12 based on Griffith *et al.* in combination with Cox *et al.* Figure 5 in the present application shows a predistorter that receives quadrature information (i.e., I and Q data values) and is connected to a phase modulator and an envelope modulator. The specification, on page 5, lines 2-3, states that the “predistorter [of Figure 5] determines separate distortion signals for the phase and envelope modulator” Figure 5 and its corresponding description within the specification therefore show that phase information and/or envelope information is distorted by the predistorter. That is, the predistorter of Figure 5 predistorts polar data values. Griffith *et al.* does not disclose a predistorter. Cox *et al.* shows a predistorter in Figures 1 and 2 that receives quadrature information and outputs predistorted quadrature information. Therefore, Cox *et al.* only predistorts quadrature information and not polar data values. Accordingly, independent claim 12 is allowable over Griffith *et al.* in combination with Cox *et al.*

Claim 13 and 14 depend from independent claim 12 and are allowable for at least the reasons applicable to claim 12, as well as due to the features recited therein.

Other Matters

Claims 4 and 5 were amended to correct minor informalities.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Donald J. Featherstone
Attorney for Applicants
Registration No. 33,876

Date: December 3, 2004

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600
339072v1